

## SOUTH DAKOTA STATEWIDE FISHERIES SURVEY

2102-F-21-R-48

**Name:** Gould Dam

**County(ies):** Stanley

**Legal Description:** T3N-R80W-Sec. 20

**GPS:** 44.21104°N 100.41910°W

**Location from nearest town:** 10 miles S and 3.5 W of Fort Pierre

**Date of present survey:** June 8-10, 2015 (netting)

**Date of last survey:** None known

**Most recent lake management plan:** None done

**Management classification:** Unknown

Primary Game Species	Secondary and Other Species
Largemouth Bass	
Bluegill	

### PHYSICAL DATA

Gould Dam is located in Stanley County, South Dakota. The surrounding land and dam grade are owned and managed by the United States Department of Agriculture, Forest Service and is part of the Fort Pierre National Grasslands. Gould Dam is a 3.6 acre pond that had a maximum depth at the time of the survey of about 5 feet.

The main submergent vegetation was a mix of sago pondweed, largeleaf pondweed and coontail. Cattails were the main emergent vegetation found around the lake. There is very limited boat access and would be limited to a canoe or small duck boat that can be loaded and unloaded by hand. Good ice fishing opportunities do exist. No contour map or depth contour has ever been done.

### CHEMICAL DATA

No pollution problems were evident at the time of the survey. Water clarity was good with a secchi disc reading of 3 feet. A temperature and dissolved oxygen profile was the only other water quality measurements done this survey and the results can be found in Table 1.

**Table 1.** Water chemistry results from Gould Dam, Stanley County, June 8, 2015.

Station	Depth (ft)	Temp (F)	DO (ppm)
A	0	72.7	8.4
A	2	70.3	10.8
A	4	69.1	2.9

## BIOLOGICAL DATA

### Methods:

Gould Dam was sampled on June 8-10, 2015, with six overnight trap net sets. The trap nets have 3ft x 5ft frames, 60ft leads and ¾ inch knotted mesh. No experimental gill nets or electrofishing was done during this survey. Fish indices and statistics were completed using Winfin.

### Results and Discussion:

#### Trap Net Catch

**Table 2.** Total catch of six, overnight ¾-inch frame nets at Gould Dam, Stanley County, June 8-10, 2015.

Species	#	%	CPUE	80% C.I.	Mean CPUE*	PSD	RSD-P	Mean Wr
Bluegill	99	86.1	16.5	± 2.6	0.0	86	0	116
Largemouth Bass	16	13.9	2.7	± 1.8	0.0	7	0	99

\* First year sampled

#### Bluegill

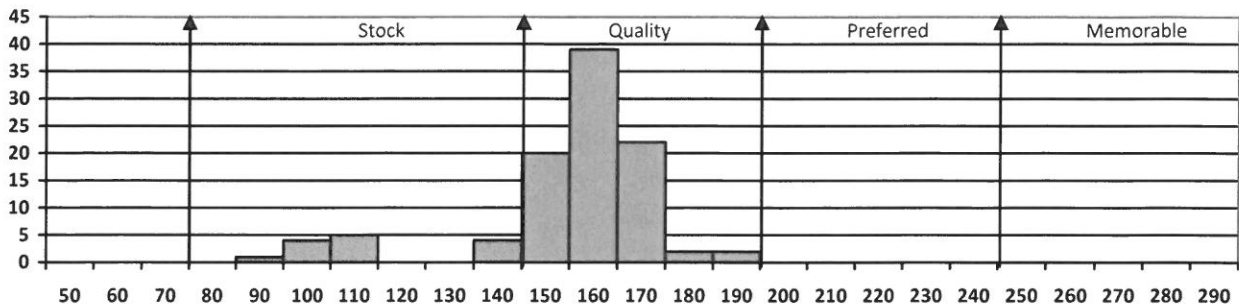
Bluegills are the dominant species present in Gould Dam. The CPUE is 16.5 fish per net night (Table 2). Growth appears to be good with means right on with statewide, regional and SLI means (Table 3). Condition is also good with a mean Wr of 116. Size structure is on the small side with most of the fish sampled in the quality category as can be seen in the length frequency histogram (Figure 1). Not much else can be said about this population at this time, but now a good sample was collected for baseline data for the next time the lake is surveyed.

**Table 3.** Average back-calculated lengths (mm) for each age class of bluegill sampled from Gould Dam, Stanley County, 2015.

Year Class	Age	N	Back-calculated Age				
			1	2	3	4	5
2013	2	4	36	86			
2012	3	37	60	108	157		
2011	4	46	51	87	112	159	
2010	5	2	68	105	118	171	185
<b>All Classes</b>		<b>89</b>	<b>54</b>	<b>96</b>	<b>129</b>	<b>165</b>	<b>185</b>
Statewide Mean			55	103	141	166	180
Region II Mean			52	97	134	164	180
SLI* Mean			53	101	138	163	180

\*Small Lakes and Impoundments

**Figure 1.** Length frequency histogram for bluegill sampled from Gould Dam, Stanley County, 2015.



### **Largemouth Bass**

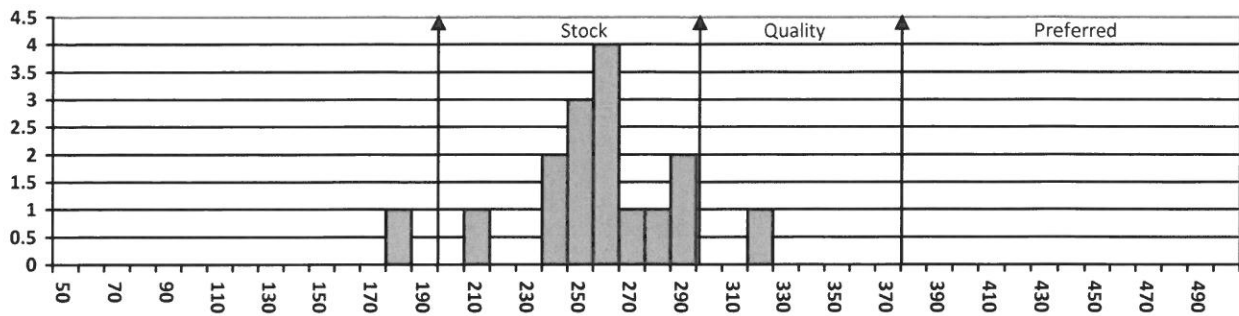
Gould Dam also contains a largemouth bass population. The trap net CPUE of 2.7 fish per net night is not bad for bass and trap nets as largemouth bass typically do not sample well in trap nets. Growth is fine with means just below statewide, regional and SLI means (Table 4). Condition is good with a mean Wr of 99. Not much can be said about this population other than an electrofishing sample would be a nice addition to the survey as it appears that Gould Dam may contain a very good bass population.

**Table 4.** Average back-calculated lengths (mm) for each age class of largemouth bass sampled from Gould Dam, Stanley County, 2015.

Year Class	Age	N	Back-calculated Age				
			1	2	3	4	5
2012	3	9	91	146	240		
2011	4	4	99	137	220	269	
2010	5	1	86	142	201	252	322
<b>All Classes</b>		<b>14</b>	<b>92</b>	<b>142</b>	<b>220</b>	<b>261</b>	<b>322</b>
Statewide Mean			96	182	250	305	342
Region II Mean			105	183	246	296	328
SLI* Mean			99	183	246	299	332

\*Small Lakes and Impoundments

**Figure 2.** Length frequency histogram for largemouth bass sampled from Gould Dam, Stanley County, 2015.



### RECOMMENDATIONS

1. Resurvey, when time allows, to further monitor the fish populations and to continually collect trend data on the pond.
2. Attempt to electrofish to see exactly what type of largemouth bass population exists.